

PTCS® Air Source Heat Pump Form (optional)

- 1) Enter all data on a mobile device or computer at ptcs.bpa.gov using the certified technician's account. This optional form can be filled out for later entry online. Issues entering data? Submit this form for entry:
 - Customers of Bonneville Power Administration (BPA) utilities: email ResHVAC@bpa.gov, fax to 1.877.848.4074, or call 1.800.941.3867
 - Customers of PGE or Pacific Power: email Residentialforms@energytrust.org or call 1.866.365.3526
- 2) Submit the Registry Installation Report (found online) and additional required documents to the customer utility. Unless requested by the utility, submission of this form is not required.

Site Information

PTCS Tech #	PTCS Tech Name	Install Date	Electric Utility	
Installation Site Address		Site City	Site State	Site Zip
Home Type: <input type="checkbox"/> Existing Site Built <input type="checkbox"/> New Construction Site Built <input type="checkbox"/> Manufactured: # of Sections <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3				
Heated Area: _____ Sq Ft		Foundation Type (Site Built): <input type="checkbox"/> Crawlspace <input type="checkbox"/> Full Basement <input type="checkbox"/> Half Basement <input type="checkbox"/> Slab		
Existing Heating System Being Replaced (If new home, indicate heating system installed):				
<input type="checkbox"/> Electric Forced Air w/out AC <input type="checkbox"/> Electric Forced Air w/ AC <input type="checkbox"/> Electric Zonal <input type="checkbox"/> Air Source Heat Pump <input type="checkbox"/> Ground Source Heat Pump <input type="checkbox"/> Natural Gas Furnace (Gas Company: _____) <input type="checkbox"/> Other Non-Electric Space Heating: _____				
Back up Heat: <input type="checkbox"/> None <input type="checkbox"/> Electric Forced Air <input type="checkbox"/> Electric Zonal <input type="checkbox"/> Natural Gas Furnace <input type="checkbox"/> Non-Electric Space Heating				

New Heat Pump Equipment Data

**If less than 9.0 HSPF or 14 SEER, check with utility for requirements.*

AHRI #	SEER*	HSPF*	Outdoor HP Capacity (tons)
Heat Pump Make	Outdoor HP Model #		<input type="checkbox"/> Non Variable Speed HP Compressor <input type="checkbox"/> Variable Speed HP Compressor
	Indoor HP Model #		Balance Point? _____ Provide BP documentation to utility.

Did you perform all of your tests in Test Only/Check Charge mode? Yes No N/A

External Static Pressure Test

Check unit operating at full capacity unless conditions do not permit.

1. Measure return static pressure 2. Measure supply plenum static pressure 3. Calculate external static pressure: add values in #1 and #2 values; ignore the minus sign	1. Return Static Pressure 2. Supply Static Pressure	Units: <u>Use same units for TrueFlow test</u> <input type="checkbox"/> Pa <input type="checkbox"/> Inches H2O 3. External Static Pressure
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TrueFlow Test

1. Measure NSOP (Normal System Operating Pressure) [A] 2. Check TrueFlow plate size and location 3. Measure TFSOP (Supply Pressure with TrueFlow Plate) [B] 4. Calculate Correction Factor [C] 5. Measure plate pressure 6. Enter Raw Flow CFM from tables [D] 7. Calculate Corrected Flow 8. Calculate CFM/ton	1. NSOP [A] 3. TFSOP [B] 5. Plate Pressure 7. Corrected Flow CFM = [C] x [D]	2a. Plate Size: <input type="checkbox"/> 14 <input type="checkbox"/> 20 4. Correction Factor [C] from table or calculate $\sqrt{([A])/[B]}$ 6. Raw Flow CFM from tables [D] 8. CFM/ton	2b. Plate location: <input type="checkbox"/> Air Handler <input type="checkbox"/> Return Grille
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Refrigerant Charge Check

Run unit for at least 15 minutes in compressor-only mode before taking readings.

Outside Air Temp	°F	Mode unit tested in: <input type="checkbox"/> Heating (if ≤ 65°F) <input type="checkbox"/> Cooling (if > 65°F)
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Heating Mode (65°F or lower)	Cooling Mode (higher than 65°F)	Alternative Test Method
Supply Air (SA) Temp	Discharge Pressure	Specify method used
Return Air (RA) Temp	Discharge Temp [A]	Target
Temp Split (SA – RA)	Liquid Line Temp [B]	Test result
Expected Temp Split from table:	Sub cooling [A] – [B]	Meets specification? <input type="checkbox"/> Y <input type="checkbox"/> N

Controls

Compressor Low Ambient Lockout control (LAL) setting at 5° or less? <input type="checkbox"/> Yes <input type="checkbox"/> Not Installed/Disabled <input type="checkbox"/> Non-Electric Backup <input type="checkbox"/> No		Auxiliary (strip) heat lockout has been set to: <input type="checkbox"/> 35°F <input type="checkbox"/> Below 35°F
HP Thermostat Make	HP Thermostat Model	
Is this a Multiple Capacity Compressor system? <input type="checkbox"/> Yes; The discharge air sensor control is used to control auxiliary heat and is set no higher than 85°F or, <input type="checkbox"/> Yes; The staging thermostat is set warmer than 85°F and the resistance heat cannot operate at temperatures above 35°F, or <input type="checkbox"/> No, this does not apply.		

Notes